

ACTIVE

Approved For Release 2001/05 : CIA-RDP78B04747A001800020016

18 NOVEMBER 1959

██████████
CONTRACTING OFFICER
2430 E STREET, N. W.
WASHINGTON 25, D. C.

STATINTL

SUBJECT: CONTRACT NO. ██████████

STATINTL

GENTLEMEN: STATINTL

THIS LETTER IS IN CONFIRMATION OF THE CALL TO YOU BY ██████████ AND OUR
VERBAL DISCUSSION WITH ██████████ ON NOVEMBER 12, 1959.
AS INDICATED AT THAT TIME, EXISTING FUNDS ON THE SUBJECT CONTRACT HAVE BEEN
EXHAUSTED ON NOVEMBER 13, AND WE HEREBY REQUEST AUTHORIZATION OF AN ADDITIONAL
██████████ FOR COMPLETION OF THE TASK SPECIFIED IN THIS CONTRACT. WE WOULD LIKE
TO, AT THIS TIME, CONFIRM THAT THE SHIPPING SCHEDULE FOR THE FIRST NADIR
DETERMINATION DEVICE HAS HAD TO BE REVISED TO DECEMBER 18, 1959. SHIPMENT OF
THE REMAINING TWO UNITS IS CURRENTLY PROJECTED ON SCHEDULE—THE SECOND UNIT
ON JANUARY 15 AND THE THIRD UNIT ON 13 FEBRUARY.

STATINTL

WE ARE ENCLOSED WITH THIS LETTER A COST BREAKDOWN SHOWING THE DISTRIBUTION
OF THE ADDITIONAL FUNDS REQUESTED. IT SHOULD BE NOTED THAT THIS COST BREAK-
DOWN DOES NOT SHOW IN DETAIL THE FACTORS CONTRIBUTING TO AN OVERRUN OF THE
ORIGINAL BUDGET. SOME OF THE FACTORS CONTRIBUTING TO THIS OVERRUN ARE LISTED
IN THE FOLLOWING SECTION:

STATINTL

1. IN GENERAL, WE HAVE FOUND THAT THE PRECISION REQUIRED IN THE NADIR
DETERMINATION DEVICE HAS RESULTED IN SUBSTANTIALLY MORE COMPLEX DESIGN
AND DEVELOPMENT TASKS. STATINTL
2. AT THE TIME OF OUR ORIGINAL PROPOSAL, IT WAS CONTEMPLATED THAT THE
VIBRATING SLIT-SCANNER, DESIGNED BY THE ██████████
WOULD BE IDEALLY SUITED TO THE REQUIREMENTS OF THE NADIR DETERMINATION
DEVICE. HOWEVER, AFTER THE EXPENDITURE OF APPROXIMATELY 600 ENGINEERING
HOURS AT A COST OF APPROXIMATELY ██████████ IN AN ATTEMPT TO ADAPT THIS
SOLUTION TO THE NADIR PROBLEM, THIS APPROACH HAD TO BE ABANDONED DUE TO
INSUFFICIENT STABILITY AND ACCURACY OF THE SLIT-SCANNER. IT THEN BECAME
NECESSARY TO PURSUE THE DEVELOPMENT OF THE OSCILLATING MIRROR-TYPE SCANNER
WHICH HAS SUCCESSFULLY BEEN INCORPORATED INTO THE NADIR UNIT. APPROXI-
MATELY 1000 ADDITIONAL ENGINEERING HOURS WERE REQUIRED TO EFFECT THE
DEVELOPMENT OF THIS ALTERNATE SCANNING DEVICE, AT A COST OF APPROXIMATELY

Declass Review by NIMA / DoD

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

STATINTL

STATINTL

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

18 NOVEMBER 1959
PAGE 2

STATINTL

██████████ ALTHOUGH THIS EXPENDITURE IS CONSIDERABLY IN EXCESS OF OUR ORIGINAL ESTIMATES, THE EFFORT INVESTED HAS PRODUCED A SCANNING SYSTEM WHICH SATISFIES THE HIGH-PRECISION REQUIREMENTS OF THE NADIR DETERMINATION DEVICE.

3. THE INITIAL ESTIMATES OF THE COST OF THE PIGM1 OUTPUT UNITS WERE MADE WITHOUT THE BENEFIT OF EXPERIENCE IN MANUFACTURING AND CHECKING OUT THESE SUB-SYSTEMS. EXPERIENCE GAINED IN MANUFACTURING THESE UNITS, SINCE THE ORIGINAL ESTIMATES WERE MADE, HAS INDICATED THAT THE ORIGINAL ESTIMATES WERE LOW. IN ADDITION, FURTHER COSTS WERE INCURRED IN REPACKAGING THE TAPE DRAWERS IN ORDER TO MAKE THEM COMPATIBLE WITH THE NADIR DETERMINATION DEVICE REQUIREMENT. THE NET EFFECT OF INCREASED MANUFACTURING COSTS AND THE ADDITIONAL DESIGN REQUIRED BY REPACKAGING HAS BEEN TO INCREASE THE TOTAL COST BY APPROXIMATELY ██████████

STATINTL

4. UNEXPECTED DELAYS IN THE RECEIPT OF VITAL COMPONENT PARTS HAVE BEEN RESPONSIBLE FOR DELAYING FINAL ASSEMBLY AND THE PROGRAMMED CHECKING PERIOD. PURCHASE ORDERS FOR THESE COMPONENT PARTS WERE PLACED AT TIMES WHICH WERE ESTIMATED TO BE WELL IN ADVANCE OF REQUIRED DELIVERY DATE. THESE DELAYS WERE IN PART A DIRECT RESULT OF THE STEEL STRIKE AND WERE DUE IN PART SIMPLY TO THE FAILURE OF CERTAIN SUPPLIERS TO MEET THEIR PROMISED DELIVERY SCHEDULES.
5. THE ORIGINAL ESTIMATE ON THIS PROGRAM ASSUMED THAT A SUBSTANTIAL PORTION OF THE MANUFACTURING OPERATIONS COULD BE PERFORMED IN OUR MANUFACTURING FACILITY. HOWEVER, THE COMPLEXITY OF THE MACHINE ULTIMATELY DICTATED THE UTILIZATION OF OUR MORE HIGHLY-SKILLED ENGINEERING MODEL MAKERS FOR A LARGE PORTION OF THE OPERATION, WITH RESULTING INCREASES IN LABOR COSTS. THIS CHANGE ACCOUNTS FOR THE REDUCTION IN MANUFACTURING COSTS AND A CORRESPONDING INCREASE IN THE ENGINEERING COSTS.

WITH FURTHER REFERENCE TO THE MATTER OF LABOR COST, IT WILL BE NOTED THAT SEVERAL LABOR RATES HAVE INCREASED SLIGHTLY DURING THE CURRENT YEAR. HOWEVER, AS A RESULT OF OUR SUCCESSFUL EFFORTS TOWARDS REDUCING INDIRECT COSTS, THE INCREASE IN DIRECT LABOR RATES HAS BEEN MORE THAN OFFSET BY THE FAVORABLE CHANGE IN BURDEN RATES.

6. A FURTHER FACTOR CONTRIBUTING TO INCREASING THE TOTAL PROGRAM COST IS THE INCREASE IN COST OF DIRECT MATERIALS. FOR EXAMPLE:

STATINTL

- 6.1 DUE TO THE COMPLEX REQUIREMENTS AND THE HIGH DEGREE OF PRECISION NECESSARY TO SATISFY SPECIFICATIONS, THE COST OF ELECTRONIC COMPONENTS PROVED TO BE SIGNIFICANTLY HIGHER THAN ORIGINALLY ESTIMATED. VOLTAGE REGULATORS, WHICH HAD BEEN ESTIMATED TO COST ██████████ PROVED UNSATISFACTORY; AND IT WAS NECESSARY IN THE INTERESTS OF REQUIRED PERFORMANCE TO PURCHASE VOLTAGE REGULATORS COSTING APPROXIMATELY ██████████. THE EXPERIENCE WITH THE VOLTAGE REGULATORS IS TYPICAL THROUGHOUT THE PROCUREMENT OF ELECTRONIC COMPONENTS FOR THE NADIR

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

STATINTL

STATINTL

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-

18 NOVEMBER 1959
PAGE 3

STATINTL

6.2 THE DESIGN, AS ULTIMATELY FIXED, RESULTED IN INCREASING THE COST OF CABINETS BY APPROXIMATELY [REDACTED]

6.3 THE ORIGINAL COST ESTIMATE DID NOT ANTICIPATE OUR BEING REQUIRED TO FURNISH PAPER TAPE PUNCHES. THESE ITEMS HAVE ADDED A TOTAL OF APPROXIMATELY [REDACTED] TO THE COST OF THE PROGRAM.

6.4 ORIGINAL COST ESTIMATES DID NOT CONTEMPLATE REDESIGN OF THE KEYBOARD AND TAPE CONTROL MODULE FOR SPECIAL COMPUTER PROGRAMMING. THIS TASK PROVED NECESSARY DURING THE COURSE OF THE DEVELOPMENT.

BASED ON COSTS INCURRED TO DATE TOGETHER WITH ADDITIONAL COSTS REFLECTED IN THE ATTACHED BREAKDOWN, TOTAL EXPENDITURES AT THE COMPLETION OF THE CONTRACT TASK WILL EXCEED OUR COST PROPOSAL ON JUNE 2, 1959 BY THE FOLLOWING AMOUNTS IN THE INDICATED AREAS:

STATINTL

ITEM	OVER/(UNDER)
ENGINEERING LABOR AND BURDEN	[REDACTED]
MANUFACTURING LABOR AND BURDEN	[REDACTED]
DIRECT MATERIALS	[REDACTED]
G AND A EXPENSE	[REDACTED]

NET INCREASE IN COSTS:

WHILE WE REGRET THAT THERE HAS BEEN A NET INCREASE IN THE CONTRACT COST HOWEVER VALID THE TECHNICAL REASONS FOR THE INCREASES MAY BE, WE HAVE BEEN VERY MUCH MORE DISTURBED BY THE FACT THAT WE WERE UNABLE TO GIVE YOU ADEQUATE ADVANCE NOTICE OF THE OVERRUN. THERE ARE SEVERAL FACTORS WHICH CONTRIBUTED TO OUR DELAY IN RECOGNIZING IN ADVANCE THE REQUIREMENTS FOR ADDITIONAL FUNDING. THE BASIC FACTOR HAS BEEN A LACK OF TIMELY COST DATA, BOTH FROM ACCOUNTING AND IN ENGINEERING ADMINISTRATION. IN RECOGNITION OF THESE DEFICIENCIES, WE HAVE BEEN, DURING THE PAST SEVERAL MONTHS, TAKING SPECIFIC ACTION TO CORRECT EXISTING WEAKNESSES AND TO INSURE THAT NEW PROBLEMS DO NOT DEVELOP IN THE FUTURE. IN THE ENGINEERING AREA, WE HAVE, EFFECTIVE SEPTEMBER 25, 1959, FILLED A LONG VACANT POSITION AT THE TOP MANAGEMENT LEVEL. ON THAT DATE, [REDACTED] WAS ASSIGNED DUTIES OF VICE-PRESIDENT, ENGINEERING WITH THE SPECIFIC OBJECTIVE OF ORGANIZING AND ADMINISTERING A TIGHTLY CONTROLLED ENGINEERING OPERATION. IN THE BRIEF PERIOD SINCE SEPTEMBER 25, [REDACTED] HAS ESTABLISHED VASTLY IMPROVED CONTROLS ON THE SCHEDULING OF ALL OF THE FACETS OF THE ENGINEERING DEPARTMENT, INCLUDING ELECTRICAL AND MECHANICAL DESIGN, DRAFTING, MODEL SHOP EFFORTS, AND PUBLICATIONS. SIGNIFICANT IMPROVEMENTS HAVE ALREADY BEEN MADE IN PLACING ALL OF THE PROGRAMS ON

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

STATINTL

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

18 NOVEMBER 1959
PAGE 4

SCHEDULE, BOTH AS REGARDS TIME AND COSTS. FURTHER, A THOROUGH REVIEW HAS BEEN MADE OF THE CAPABILITIES OF ALL OF THE PERSONNEL IN ENGINEERING WITH PARTICULAR ATTENTION BEING GIVEN TO THE PERSONNEL IN SENIOR POSITIONS. AS A RESULT OF THIS PERSONNEL REVIEW, A REPLACEMENT HAS BEEN MADE FOR THE CHIEF OF THE MECHANICAL DESIGN SECTION AND AN EXPERIENCED MAN HAS BEEN PLACED IN CHARGE OF THE ELECTRICAL DESIGN GROUP. ALMOST IMMEDIATE IMPROVEMENT IN THE OPERATION OF BOTH OF THESE GROUPS HAS BEEN EVIDENCED.

THE ENGINEERING DEPARTMENT HAS BEEN RE-ORGANIZED SO AS TO EMPHASIZE THE PRODUCT MANAGER CONCEPT IN THE MANAGEMENT OF THE TECHNICAL DEPARTMENTAL RESPONSIBILITIES. THE ENCLOSED ORGANIZATION CHART REFLECTS THIS CHANGE. THE PRODUCT MANAGER CONCEPT HAS BEEN APPLIED TO PROVIDE CONTINUITY IN THE ENGINEERING DESIGN AND DEVELOPMENT EFFORT BY ASSIGNING SENIOR ENGINEERS AS PRODUCT MANAGERS, EACH OF WHOM IS RESPONSIBLE BOTH FOR THE DEVELOPMENT OF A SPECIFIC CLASS OF PRODUCTS AS WELL AS FOR TECHNICAL LIAISON WITH CUSTOMERS. THIS LIAISON FUNCTION WILL ELIMINATE A SERIOUS DEFICIENCY IN PREVIOUSLY ESTABLISHED METHODS OF CONTROL. PRODUCT MANAGERS ARE ALSO RESPONSIBLE FOR CLOSE INTERNAL COORDINATION OF THE ENTIRE DESIGN AND MANUFACTURING EFFORT RELATED TO DEVELOPMENT CONTRACTS IN THEIR AREA OF TECHNICAL COMPETENCE. THIS RESPONSIBILITY HAS BEEN ASSIGNED TO THE PRODUCT MANAGER TO INSURE THAT CONTRACTUAL COMMITMENTS ARE COMPLETED ON TIME, WITHIN BUDGETS, AND THAT THE TECHNICAL RESULTS WILL SATISFY CUSTOMER REQUIREMENTS IN FULL.

WITH REFERENCE TO THE ACCOUNTING FUNCTION, A DAILY COST PROGRAM HAS BEEN INITIATED ON ALL MAJOR CONTRACTS. MATERIALS AND OTHER DIRECT CHARGES ARE NO LONGER REPORTED ON THE COST REPORT ON THE BASIS OF "RECEIVERS" BUT ARE ACCOUNTED FOR IMMEDIATELY WHEN FUNDS ARE OBLIGATED BY PURCHASE ORDER COMMITMENTS. IN ORDER TO TAKE FULL ADVANTAGE OF THE MORE ACCURATE AND TIMELY INFORMATION FURNISHED TO ENGINEERING BY THE ACCOUNTING DEPARTMENT, A PROGRAM OF WEEKLY PROJECT REVIEW MEETINGS HAS BEEN ESTABLISHED. THE MEETING IS ATTENDED BY THE VICE-PRESIDENT, ENGINEERING, CHIEF ENGINEER, ALL PRODUCT MANAGERS, AND CHIEFS OF THE MECHANICAL AND ELECTRICAL DESIGN SECTIONS AS WELL AS THE HEADS OF THE DRAFTING AND MODEL SHOP, AND THE LIAISON ENGINEER. EACH PROGRAM IS REVIEWED FOR PROGRESS DURING THE WEEK, PROBLEMS ENCOUNTERED, PROJECTED ACCOMPLISHMENT IN THE FOLLOWING PERIOD, AND EXPENDITURE OF FUNDS AGAINST BUDGET. AT APPROXIMATELY THE 50 PER CENT EXPENDITURE POINT ON A PARTICULAR PROGRAM, IT IS SUBJECTED TO A DETAILED TECHNICAL PROCESS AUDIT BOTH BY THE CHIEF ENGINEER AND THE COGNIZANT PRODUCT MANAGER. WHENEVER NECESSARY, AS A RESULT OF THIS AUDIT, A REVISED ESTIMATE IS PREPARED FOR EACH PROGRAM. A FURTHER TECHNICAL AUDIT IS CONDUCTED WHEN 75 PER CENT OF THE BUDGET HAS BEEN EXPENDED AND REVISIONS ARE MADE AS NECESSARY, BOTH IN THE COSTS AND THE TIME REQUIRED TO COMPLETE THE PROGRAM. IN THE CASE OF CPFF DEVELOPMENT PROGRAMS, A DAILY PROJECT EVALUATION IS MADE ONCE 90 PER CENT OF THE FUNDS HAVE BEEN EXPENDED.

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

STATINTL

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

18 NOVEMBER 1959
PAGE 5

WITH RESPECT TO THE CONTRACT FOR THE NADIR DETERMINATION DEVICE, EVERY EFFORT IS BEING MADE TO ACCELERATE THE COMPLETION OF THE FIRST UNIT AND THE REMAINING TWO TO BE DELIVERED THE EARLY PART OF NEXT YEAR. IN ADDITION TO THE PROCEDURES DISCUSSED ABOVE, BOTH THE LIAISON ENGINEER AND THE ENGINEERING PLANNER ARE ACTIVE, ON A DAILY BASIS, IN EXPEDITING AND COORDINATING THESE EFFORTS.

SINCE THE ORIGINAL FUNDS ALLOCATED TO THIS CONTRACT WERE EXPENDED AS OF NOVEMBER 13, IT IS RECOGNIZED THAT A REASONABLE AMOUNT OF TIME WILL BE NECESSARY FOR YOU TO EVALUATE AND APPROVE THIS REQUEST FOR ADDITIONAL FUNDS. IN VIEW OF THE FACT THAT WE ARE UNABLE TO GIVE YOU ADVANCE NOTICE OF THE NEED FOR FURTHER FUNDS, WE CONSIDER OURSELVES OBLIGED TO CONTINUE WORK ON THE PROGRAM UNTIL YOU HAVE HAD TIME TO ACT ON THIS MATTER. ACCORDINGLY, AND IN ORDER TO MINIMIZE THE POSSIBILITY OF COSTLY DELAYS WHICH WOULD RESULT FROM A DISCONTINUITY OF THE WORK ON THIS CONTRACT, WE WILL CONTINUE WORK WITHOUT INTERRUPTION AND AT A MAXIMUM EFFORT UNTIL NOVEMBER 30. IN ANY EVENT, WE WILL NOT STOP WORK ON THIS CONTRACT WITHOUT PRIOR COORDINATION WITH YOUR OFFICE. IN TURN, WE TRUST THAT IT WILL BE POSSIBLE FOR YOU TO ACT PROMPTLY IN APPROVING OUR REQUEST FOR ADDITIONAL FUNDS. IF WE CAN BE OF ANY ASSISTANCE IN EXPEDITING THIS MATTER, PLEASE FEEL FREE TO CALL ON US.

SINCERELY,

EXECUTIVE VICE-PRESIDENT

HJR:JP

ENCLOSURES (2)

CC: 

STATINTL

STATINTL

ILLEGIB

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4

Next 1 Page(s) In Document Exempt

Approved For Release 2001/05/11 : CIA-RDP78B04747A001800020016-4